Charity Link

Team 23 - Project Backlog

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Problem Statement:

The underprivileged often have to seek out resources for themselves, which at times is not easy, efficient, or secure for them to carry out. Donations were popularized by Goodwill, and even those are often resold for a higher value price. Our project aims to streamline store management and distribution of outreach programs held by non-profit organizations, along with providing a user-friendly donation platform for individuals as well. For people who are in need, this project aims to give them a one-stop location for all their food, clothing and various other needs online.

Background Information:

Audience

When seeking out resources for themselves, people in need often don't have a secure, streamlined online platform to make use of. Similarly, nonprofits often lack the digital equipment to scale their resources to the people who need them the most. It is for this reason that there is a high need in the donation market for a web app that not only acts as a digital storefront for nonprofits to manage their inventory and tackle their scaling problems with; but also one that acts as a one-stop destination for the underprivileged to find all the resources they are in need of. Furthermore, even with the rise in online marketplaces and delivery services, there are still not any apps that facilitate a way to deliver essential commodities directly to the people in need.

Similar Platforms

A specific app like the one we are proposing doesn't exist verbatim in the donation industry. However, certain aspects of our app do follow a similar pattern to some existing softwares such as the delivery model of DoorDash as well as the COVID test delivery systems as utilized by CVS and Walgreens. Additionally, existing marketplace websites that map close to our donation marketplace interface include Facebook Marketplace and

Craigslist. Furthermore, existing digital storefronts like Amazon, Walmart, and any other online shopping platform have a similar functionality to the one we are trying to provide to non profit organizations, however it's worth noting that our project idea combines all of these functionalities and uses them to cater to donations.

Limitations

Popular online marketplaces such as Facebook Marketplace and Craigslist have an emphasis on sellers and consumers, with their main motive of interaction being a profitable transaction of items. While these apps serve a purpose for those that wish to make a profit, there are almost no apps that are beneficial to non-profit organizations and people that wish to make a donation, free of charge. On top of this, most programs that are currently being used by non-profit organizations are either outdated or nonexistent.

We seek to address these issues by creating a platform that will enable those in need, donors, and non-profit organizations to have more efficient interactions to transport supplies to those who need them.

Functional Requirements:

There are four permissions referenced below which consist of donor-oriented users, receiver-oriented users, organizations, and organization managers.

*A user includes both the receiver/donor as they both have the same permissions, but a user may select and update their preferred user-type setting.
*Order or buy doesn't necessarily mean to purchase with money.

#	Functional Requirements
1.	As a user, I would like to create an account.
2.	As a user, I would like to create an account securely.
3.	As a user I would like to reset my password.
4.	As an organization, I would like to add, edit, and delete employee accounts to my organization.
5.	As a user, I would like to delete my account.

6.	As an organization, I would like to have a profile listing my locations, mission statement, and logo.
7.	As a user, I would like to have a homepage to navigate the website.
8.	As a user, I would like to view organization profiles.
9.	As a donor-oriented user, I would like to view where I can donate items to organizations.
10.	As a user, I would like to have the option to request a pick-up location. Face-to-face, drop off, or at a public location.
11.	As a donor-oriented user and an employee, I would like to fulfill user requests.
12.	As a receiver-oriented user, I would like to request items both inside and outside of the catalog.
13.	As a user, I would like to have the option of having a donor-oriented screen or receiver-oriented screen.
14.	As a user, I would like to be notified of what my general information is used for and be able to deny giving certain information for some app functionalities.
15.	As an organization/organization manager, I would like to delete items in my inventory.
16.	As an organization/organization manager, I would like to add items to my inventory.
17.	As an organization, I would like to view organization managers/registered employees.
18.	As a donor-oriented user, I would like to deliver items for organizations.
19.	As a receiver-oriented user, I would like to check item delivery status.
20.	As a donor-oriented user, I would like to see local requests.
21.	As a user, I would like to update my donor-oriented status or receiver-oriented status.
22.	As an organization/organization manager, I would like to edit items in my inventory.

23.	As an organization/organization manager, I would like to search for items by category in my inventory.
24.	As an organization/organization manager, I would like to search for items by name in my inventory.
25.	As an organization/organization manager, I would like to search for items by reference number in my inventory.
26.	As a user, I would like to search for items by category in the catalog.
27.	As a user, I would like to search for items by name in the catalog.
28.	As a user, I would like to browse items separate from the search menu.
29.	As an organization/organization manager, I would like to utilize demand forecasting to manage inventory supplies.
30.	As an organization/organization manager, I would like to make custom hashtags/custom categories.
31.	As a user, I would like to view pictures of items in the catalog/inventory.
32.	As a user, I would like to be able to upload an image or a default image of my item when donating or creating a new item in inventory.
33.	As a user, I would like a way to give feedback and suggestions regarding the website.
34.	As a user, I would like to revoke a requested item.
35.	As a user, I would like to cancel a delivery.
36.	As a user, I would like to view events near my location.
37.	As an organization, I would like to create events with a title, location, date, and description field.
38.	As an organization, I would like to update and delete events.

Non-Functional Requirements:

Architecture and Performance

Our application will use a web application that will be divided into a frontend and backend. We plan on building a RESTful API (Representational state transfer) in java using the spring boot framework which will use JDBC (Java Database Connectivity) and ORM (Object–relational mapping) framework, Hibernate, to interface with a SQL

database where all of our data will be stored in a relational database model. The API will then be called by the frontend to interface with the data. We plan on using ReactJS for our front end. Overall, this will allow our work to be entirely separated allowing us to develop the backend and frontend requirements in parallel to each other.

Security

Since we are dealing with personal addresses and large nonprofit organizations, our website will be able to conceal information from unauthorized individuals. There will be two separate logins, one for the users, who will request and donate individually, and one for organizations who can manage their employee logins. Our information will be stored using SQL and we are also using Hibernate, an object relational mapping framework, which will prevent SQL injections.

Usability

The interface should be easy to understand and navigate through for any user whether or not they have any technical background. We plan on having separate menus for donors/donees and organizations that will both be accessible on the same website by selecting a dropdown on the homepage. We will also make sure that the web app can be viewed on all aspect ratios and resolutions.

Hosting/Development

We plan on hosting the ReactJS web app on GitHub pages. We plan on hosting the backend, Java API, and the SQL database, on Azure.